
Conventional Arms Transfers to Developing Nations, 1999-2006

By

Richard F. Grimmett

Specialist in National Defense Foreign Affairs, Defense, and Trade Division

[The following are excerpts of the Conventional Arms Transfers to Developing Nations, 1999-2006, the complete report including all supporting charts and graphics are available at the following web site: <http://openers.com/document/RL34187/2007-09-26%2000:00:00.>]

Introduction and Overview

This report provides Congress with official, unclassified, background data from U.S. government sources on transfers of conventional arms to developing nations by major suppliers for the period 1999 through 2006. It also includes some data on worldwide supplier transactions. It updates and revises the Congressional Research Service (CRS) Report RL33696, *Conventional Arms Transfers to Developing Nations, 1998-2005*.

For most of recent American history, maintaining regional stability, and ensuring the security of U.S. allies and friendly nations throughout the world, have been important elements of U.S. foreign policy. Knowing the degree to which individual arms suppliers are making arms transfers to individual nations or regions provides Congress with a context for evaluating policy questions it may confront. Such policy questions may include, for example, whether or not to support specific U.S. arms sales to given countries or regions or to support or oppose such arms transfers by other nations.

The data in this report may also assist Congress in evaluating whether multilateral arms control arrangements or other U.S. foreign policy initiatives are being supported or undermined by the actions of arms suppliers. The principal focus of this report is the level of arms transfers by major weapons suppliers to nations in the developing world, where most of the potential for the outbreak of regional military conflicts currently exists. For decades, during the height of the Cold War, providing conventional weapons to friendly states was an instrument of foreign policy utilized by the U.S. and its allies. This was equally true for the Soviet Union and its allies. The underlying rationale for U.S. arms transfer policy then was to help ensure that friendly states were not placed at risk through a military disadvantage created by arms transfers by the Soviet Union or its allies.

The data in this report illustrate how global patterns of conventional arms transfers have changed in the post-Cold War and post-Persian Gulf War years. Relationships between arms suppliers and recipients continue to evolve in response to changing political, military, and economic circumstances. Where before the principal motivation for arms sales by foreign suppliers might have been to support a foreign policy objective, today that motivation may be based as much on economic considerations as those of foreign or national security policy.

In this context, the developing world continues to be the primary focus of foreign arms sales activity by conventional weapons suppliers. During the period of this report, 1999-2006, conventional arms transfer agreements (which represent orders for future delivery) to developing nations comprised 66.4 percent of the value of all international arms transfer agreements. The portion of agreements with developing countries constituted 65.7 percent of all agreements globally from 2003-2006. In 2006, arms transfer agreements with developing countries accounted for 71.5 percent of the value of all such agreements globally. Deliveries of conventional arms to developing nations, from 2003-2006, constituted 73.3 percent of all international arms deliveries. In 2006, arms deliveries to developing nations constituted 73.6 percent of the value of all such arms deliveries worldwide. The data in this

new report supersede all data published in previous editions. Since these new data for 1999-2006 reflect potentially significant updates to and revisions in the underlying databases utilized for this report, only the data in this most recent edition should be used. The data are expressed in U.S. dollars for the calendar years indicated, and adjusted for inflation. U.S. commercially licensed arms export delivery values are excluded. Also excluded are arms transfers by any supplier to subnational groups.

Calendar Year Data Used

All arms transfer and arms delivery data in this report are for the *calendar* year or *calendar* year period given. This applies to U.S. and foreign data alike. United States government departments and agencies publish data on U.S. arms transfers and deliveries but generally use the U.S. fiscal year as the computational time period for these data. As a consequence, there are likely to be distinct differences noted in those published totals using a fiscal year basis and those provided in this report which use a calendar year basis.

Arms Transfer Values

The values of arms transfer agreements (or deliveries) in this report refer to the total values of conventional arms orders (or deliveries as the case may be) which include all categories of weapons and ammunition, military spare parts, military construction, military assistance and training programs, and all associated services.

Definition of Developing Nations and Regions

As used in this report, the developing nations category includes all countries *except* the United States, Russia, European nations, Canada, Japan, Australia, and New Zealand. A listing of countries located in the regions defined for the purpose of this analysis Asia, Near East, Latin America, and Africa is provided at the end of the report.

Constant 2006 Dollars

Throughout this report values of arms transfer agreements and values of arms deliveries for all suppliers are expressed in U.S. dollars. Values for any given year generally reflect the exchange rates that prevailed during that specific year. The report converts these dollar amounts (current dollars) into constant 2006 dollars. Although this helps to eliminate the distorting effects of U.S. inflation to permit a more accurate comparison of various dollar levels over time, the effects of fluctuating exchange rates are not neutralized. The exceptions to this rule are all regional data tables that are composed of four-year aggregate dollar totals (1999-2002 and 2003-2006). These tables are expressed in current dollar terms. And where tables rank leading arms suppliers to developing nations or leading developing nation recipients using four-year aggregate dollar totals, these values are expressed in current dollars.

Major Findings

General Trends in Arms Transfers Worldwide

The value of all arms transfer agreements worldwide (to both developed and developing nations) in 2006 was \$40.3 billion. This was a decrease in arms agreements values over 2005, a decline of nearly 13 percent.

In 2006, the U.S. led in arms transfer agreements worldwide, making agreements valued at \$16.9 billion (41.9 percent of all such agreements) up from \$13.5 billion in 2005. Russia ranked second with \$8.7 billion in agreements (21.6 percent of these agreements globally) up from \$7.5 billion in 2005. The United Kingdom ranked third, its arms transfer agreements worldwide standing at \$3.1 billion in 2006, up from \$2.9 billion in 2005. The United States, Russia, and the United Kingdom

collectively made agreements in 2006 valued at \$28.7 billion, 71.2 percent of all international arms transfer agreements made by all suppliers.

For the period 2003-2006, the total value of all international arms transfer agreements (\$160 billion) was higher than the worldwide value during 1999-2002 (\$156.7 billion), an increase of 2.1 percent. During the period 1999-2002, developing world nations accounted for 67.1 percent of the value of all arms transfer agreements made worldwide. During 2003-2006, developing world nations accounted for 65.7 percent of all arms transfer agreements made globally. In 2006, developing nations accounted for 71.5 percent of all arms transfer agreements made worldwide

In 2006, the United States ranked first in the value of all arms deliveries worldwide, making \$14 billion in such deliveries or 51.9 percent. This is the eighth year in a row that the U.S. has led in global arms deliveries. Russia ranked second in worldwide arms deliveries in 2006, making \$5.8 billion in such deliveries. The United Kingdom ranked third in 2006, making \$3.3 billion in such deliveries. These top three suppliers of arms in 2006 collectively delivered nearly \$23.1 billion, 85.6 percent of all arms delivered worldwide by all suppliers in that year.

The value of all international arms deliveries in 2006 was \$27 billion. This is a increase in the total value of arms deliveries from the previous year (a rise from \$26.2 billion), but still the second lowest deliveries total for the 1999-2006 period. Moreover, the total value of such arms deliveries worldwide in 2003-2006 (\$120.7 billion) was substantially lower in the value of arms deliveries by all suppliers worldwide from 1999-2002 (\$144.8 billion, a decline of over \$24 billion).

Developing nations from 2003-2006 accounted for 73.3 percent of the value of all international arms deliveries. In the earlier period, 1999-2002, developing nations accounted for 71.7 percent of the value of all arms deliveries worldwide. In 2006, developing nations collectively accounted for 73.6 percent of the value of all international arms deliveries.

Worldwide weapons orders declined in 2006. The total of \$40.3 billion, fell from \$46.3 billion in 2005, a decline of nearly 13 percent. Global arms agreement values for the years other than 2006 ranged from \$46.3 billion in 2005 to \$31.7 billion in 2003. Of the major arms orders secured in 2006 most were made by the traditional major suppliers. In some instances these orders represented significant new acquisitions by the purchasing country. In others they reflected the continuation of a longer term weapons acquisition program.

A decline in new weapons sales can also be explained, in part, by the practical need for some purchasing nations to absorb and integrate major weapons systems they have already purchased into their force structures. The need to do this may, at the same time, increase the number of arms contracts related to training and support services, even as it reduces the number of large and costly orders for new military equipment.

An intensely competitive weapons marketplace continues to lead several producing countries to focus sales efforts on prospective clients in nations and regions where individual suppliers have had competitive advantages resulting from well established military support relationships. Within Europe, arms sales to new North Atlantic Treaty Organization (NATO) member nations to support their military modernization programs have created new business for arms suppliers, while allowing these NATO states to sell some of their older generation military equipment, in refurbished form, to other less developed countries. While there are inherent limitations on these European sales due to the smaller defense budgets of many of the purchasing countries, creative seller financing options, as well as the use of co-assembly, co-production, and counter-trade agreements to offset costs to the buyers, have continued to facilitate new arms agreements. The United States and European countries or consortia seem likely to compete vigorously for prospective arms contracts within the European region in the foreseeable future. Such sales seem particularly important to European suppliers, as they can potentially compensate, in part,

for lost weapons deals elsewhere in the developing world that result from reduced demand for new weapons.

Efforts also continue among developed nations to protect important elements of their national military industrial bases by limiting arms purchases from other developed nations. Nevertheless, several key arms suppliers have placed additional emphasis on joint production of various weapons systems with other developed nations as a more effective way to preserve a domestic weapons production capability, while sharing the costs of new weapons development. The consolidation of certain sectors of the domestic defense industries of key weapons producing nations continues, in the face of intense foreign competition. At the same time, some supplying nations have chosen to manufacture items for niche weapons categories where their specialized production capabilities give them important advantages in the evolving international arms marketplace.

Some developing nations have reduced their weapons purchases in recent years primarily due to their limited financial resources to pay for such equipment. Other prospective arms purchasers in the developing world with significant financial assets have exercised caution in launching new and costly weapons procurement programs. Increases in the price of oil, while an advantage for major oil producing states in funding their arms purchases, has, simultaneously, caused economic difficulties for many oil consuming states, contributing to their decisions to defer or curtail new weapons purchases. The state of the world economy has induced a number of developing nations to choose to upgrade existing weapons systems in their inventories, while reducing their purchases of new ones. This approach may curtail sales of new weapons systems for a time, but the weapons upgrade market can be very lucrative for some arms producers, and partially mitigate the effect of losing major new sales.

Although, overall, there appear to be fewer large weapons purchases being made by developing nations in the Near East and in Asia, when contrasted with arms sales activity over a decade ago, major purchases continue to be made by a select few developing nations in these regions. These purchases have been made principally by China and India in Asia, and Saudi Arabia in the Near East. Even though these tendencies are subject to abrupt change based on the strength of either the regional or international economies, or the threat assessments of individual states, the strength of individual economies of a wide range of nations in the developing world continues to be a significant factor in the timing of many of their arms purchasing decisions.

Latin America, and, to a much lesser extent, Africa, are regions where some nations continue to express interest in modernizing important sectors of their military forces. Some large arms orders (by regional standards) have been placed by a few states in these two regions within the last decade. But in Latin America and Africa, as with most nations in the developing world, nations are constrained in their weapons purchases by their existing financial resources. So long as there is limited availability of seller-supplied credit and financing for weapons purchases, and national budgets for military purchases remain relatively low, it seems likely that major arms sales to these two regions of the developing world will remain sporadic in nature.

General Trends in Arms Transfers to Developing Nations

The value of all arms transfer *agreements* with developing nations in 2006 was nearly \$28.8 billion, a decrease from the \$31.8 billion total in 2005. In 2006, the value of all arms *deliveries* to developing nations (\$19.9 billion) was lower than the value of 2005 deliveries (over \$20.3 billion), and the lowest total for the 1999-2006 period.

Recently, from 2003-2006, the United States and Russia have dominated the arms market in the developing world. The United States ranked first for three out of four years during this period, while Russia ranked second for 3 out of 4 of these years in the value of arms transfer *agreements*. From

2003-2006, the United States made \$34.1 billion in arms transfer agreements with developing nations, 32.4 percent of all such agreements. Russia, the second leading supplier during this period, made \$25.8 billion in arms transfer agreements or 24.5 percent. The United Kingdom, the third leading supplier, from 2003-2006 made \$10.5 billion or 10 percent of all such agreements with developing nations during these years. In the earlier period (1999-2002) the U.S. ranked first with \$45.4 billion in arms transfer agreements with developing nations or 43.1 percent; Russia made \$25.4 billion in arms transfer agreements during this period or 24.1 percent. France made \$5.5 billion in agreements or 5.2 percent.

From 1999-2006, most arms transfers to developing nations were made by two to three major suppliers in any given year. The United States has ranked first among these suppliers for seven of the last eight years during this period, falling to third place in 2005. Russia has been a continuing strong competitor for the lead in arms transfer agreements with developing nations, ranking second every year from 1999 through 2004, and first in 2005. Despite its lack of the larger traditional client base for armaments held by the United States and the major West European suppliers, Russia's recent successes in concluding new arms orders suggests that Russia is likely to continue to be, for the short term at least, a significant leader in arms agreements with developing nations. Russia's most significant high value arms transfer agreements continue to be with China and India, Russia has had some success in concluding arms agreements with clients beyond its principal two. Russia continues to seek to expand its prospects in North Africa, the Middle East, and Southeast Asia.

Most recently Russia has increased sales efforts in Latin America, despite having essentially abandoned major arms sales efforts there following the Cold War's end. Venezuela has become a significant new arms client gained by Russia in this region. The Russian government has further stated that it has adopted more flexible payment arrangements for its prospective customers in the developing world, including a willingness in specific cases to forgive outstanding debts owed to it by a prospective client in order to secure new arms purchases. Furthermore, Russia continues its efforts to enhance the quality of its follow-on support services to make Russian products more attractive and competitive, and to assure its potential clients that it can effectively provide timely service for weapons systems it exports.

Major West European arms suppliers, such as France and the United Kingdom, have concluded large orders with developing countries over the last eight years, based on either long-term supply relationships or their having specialized weapons systems they can readily provide. Germany has been a key source of naval systems for developing nations. Despite increased competition between the U.S. and the other major arms suppliers, the U.S. appears likely to hold its position as the principal supplier to key developing world nations, especially those able to afford major new weapons. Because the United States has developed such a wide base of arms equipment clients globally it is able to conclude a notable number of agreements annually to provide upgrades, ordnance and support services for the large variety of weapons systems it has sold to its clients for decades. Thus, even when the U.S. does not conclude major new arms agreements in a given year, it can still register significant arms agreement values based on transactions in these other categories.

The wealthier developing countries continue as the focus for new arms sales by the principal supplying nations. Arms transfers to the less affluent developing nations also continue to be constrained by the scarcity of funds in their defense budgets, and the unsettled state of the international economy. The overall decline in the level of the arms agreements with developing nations that began in 2001 and continued until 2004, appears to have halted. There was a rise in arms agreements with the developing world in 2004 and again in 2005. Although there was a decline in arms agreements with the developing world in 2006, the overall level of arms agreements with such nations from 2004-2006 has been on the increase.

China, other European, and non-European suppliers, such as Sweden and Israel, appear to have increased their participation in the arms trade with the developing world in recent years, albeit at a much lower levels, and with uneven results, than those of the major suppliers. Nevertheless, these non-major arms suppliers have proven capable, on occasion, of making arms deals of consequence. Most of their annual arms transfer agreement values during 1999-2006 have been comparatively low, although larger when they are aggregated together as a group. In various cases they have been successful in selling older generation equipment, even while they procure newer weaponry to update their own military forces. These arms suppliers also are more likely to be sources of small arms and light weapons, and associated ordnance, rather than routine sellers of major military equipment. Most of these arms suppliers are not likely to consistently rank with the traditional major suppliers of advanced weaponry in the value of their arms agreements and deliveries.

United States

The total value in real terms of U.S. arms transfer agreements with developing nations rose from \$6.5 billion in 2005 to \$10.3 billion in 2006. The U.S. share of the value of all such agreements was 35.8 percent in 2006, up from a 20.4 percent share in 2005.

In 2006, the total value of U.S. arms transfer agreements with developing nations was attributable to a couple of major deals with clients in Asia, particularly with Pakistan, and in the Near East. A substantial number of smaller valued purchases by a wide number of traditional U.S. arms clients throughout the Near East and Asia contributed notably to the overall U.S. agreements total. The arms agreement total of the United States in 2006 illustrates the continuing U.S. advantage of having well established defense support arrangements with weapons purchasers worldwide, based upon the existing variety of U.S. weapons systems their militaries utilize. U.S. agreements with all of its clients in 2006 include not only sales of major weapons systems, but also the upgrading of systems previously provided. The U.S. totals also include agreements for a wide variety of spare parts, ammunition, ordnance, training, and support services which, in the aggregate, have significant value.

Among the larger valued arms transfer agreements the U.S. concluded in 2006 with developing nations were: with Pakistan for the purchase of 36 F-16C/D Block 50/52 fighter aircraft for \$1.4 billion; a variety of missiles and bombs to be utilized on the F-16 C/D fighter aircraft for over \$640 million; the purchase of Mid- Life Update Modification Kits to upgrade Pakistan's F-16A/B aircraft for \$890 million for 115 M109A5 155mm Self-propelled howitzers for \$52 million. Other U.S. arms agreements in 2006 were with Saudi Arabia for re-manufacturing and upgrading its AH-64A APACHE helicopters to the AH-64D model, together with associated equipment for \$340 million; for 165 LINK MIDS/LVT communications terminals and associated equipment for \$134 million; with the United Arab Emirates for Evolved Seasparrow Ship to Air missiles for \$106 million; with Singapore for a variety of missiles, bombs and associated support for its F-15 fighter aircraft for \$191 million, as well as for pilot training and support its F-16s for \$104 million; and with South Korea for 58 Harpoon Block II missiles for \$114 million.

Russia

The total value of Russia's arms transfer agreements with developing nations in 2006 was \$8.1 billion, a increase from \$7.2 billion in 2005, placing Russia second in such agreements with the developing world. Russia's share of all developing world arms transfer agreements increased, rose from 22.6 percent in 2005 to 28.1 percent in 2006.

Russian arms transfer agreement totals with developing nations have been notable during the last four years. During the 2003-2006 period, Russia ranked second among all suppliers to developing countries, making \$25.8 billion in agreements (in current 2006 dollars). Russia's status as a leading supplier of arms to developing nations stems from an increasingly successful effort to overcome

the significant economic and political problems associated with the dissolution of the former Soviet Union. The traditional arms clients of the former Soviet Union were generally less wealthy developing countries valued as much for their political support in the Cold War, as for their desire for Soviet weaponry. Many of these Soviet-era client states received substantial military aid grants and significant discounts on their arms purchases. After 1991 Russia consistently placed a premium on obtaining hard currency for the weapons it sold. Faced with stiff competition from Western arms suppliers in the 1990s and the early part of this decade, Russia gradually adapted its selling practices in an effort to regain and sustain an important share of the developing world arms market.

Russian leaders, in recent years, have made significant efforts to provide more creative financing and payment options for prospective arms clients. They have also agreed to engage in counter-trade, offsets, debt-swapping, and, in key cases, to make significant licensed production agreements in order to sell its weapons. The willingness to license production has been a central element in several cases involving Russia's principal arms clients, China and India. Russia's efforts to expand its arms customer base have met with mixed results. Russia's arms sales efforts, beyond those with China and India, have been primarily focused on Southeast Asia. It has had some success in securing arms agreements with Malaysia, Vietnam and Indonesia, even though recurring financial problems of some clients in this region have hampered significant growth in Russian sales there. Most recently it has concluded major arms deals with Venezuela and with Algeria. Elsewhere in the developing world Russian military equipment is competitive because it ranges from the most basic to the highly advanced, and can be less expensive than similar arms available from other major suppliers.

Sale of military aircraft and missiles continues to be a significant portion of Russia's arms exports. Yet the absence of major new research and development efforts in this and other military equipment areas may jeopardize long-term Russian foreign arms sales prospects. While military weapons research and development (R&D) programs exist in Russia, other major arms suppliers in the West are currently well advanced in the process of developing and producing weaponry that is much more advanced than that in existing Russian R&D programs.

In spite of these potential difficulties, Russia continues to have important arms development and sales programs involving China and India, which should provide it with sustained business throughout this decade. Through agreements concluded in the mid-1990s, Russia has sold major combat fighter aircraft, and main battle tanks to India, and has provided other major weapons systems through lease or licensed production. It continues to provide support services and items for these various weapon systems. In 2006, Russia's largest arms agreement with India was for the sale of 3 Talwar-class frigates for an estimated \$1.3-1.6 billion.

Sales of advanced weaponry in South Asia by Russia have been a matter of ongoing concern to the U.S., because of long-standing tensions between India and Pakistan. The acquisition of a new weapon system by India has usually led Pakistan to seek comparable weapons or those with offsetting capabilities. Keeping a potentially destabilizing arms race in this region within check is a U.S. policy objective.¹

Russia's other key arms client in Asia has been China, especially for advanced aircraft and naval systems. Since 1996, Russia has sold China Su-27 fighter aircraft and agreed to licensed production of them. It has sold the Chinese quantities of Su-30 multi-role fighter aircraft, Sovremenny-class destroyers equipped with Sunburn anti-ship missiles, and Kilo-class Project 636 submarines. Russia

1. For detailed background see CRS Report RL33515, *Combat Aircraft Sales to South Asia: Potential Implications*, by Christopher Bolkcom, Richard F. Grimmett, and K. Alan Kronstadt; CRS Report RL32115, *Missile Proliferation and the Strategic Balance in South Asia*, by Andrew Feickert and K. Alan Kronstadt; and CRS Report RL30427, *Missile Survey: Ballistic and Cruise Missiles of Selected Foreign Countries*, by Andrew Feickert.

has also sold the Chinese a variety of other weapons systems and missiles. In 2005, Russia agreed to sell China 30 IL-76TD military transport aircraft and 8 IL-78M aerial refueling tanker aircraft for more than \$1 billion. Russia also signed new arms transfer agreements with China for a number of AL-31F military aircraft engines for \$1 billion, and agreed to sell jet engines for China's FC-1 fighter aircraft at a cost in excess of \$250 million. Chinese arms acquisitions are apparently aimed at enhancing its military projection capabilities in Asia, and its ability to influence events throughout the region. These acquisitions continue to be monitored by U.S. policy makers. The U.S. policy interest is, among other things, ensuring that it provides appropriate military equipment to U.S. allies and friendly states in Asia to help offset any prospective threat China may pose to such nations, while keeping the U.S. military aware of any threat it may face in any confrontation with China.² In 2006 there were no especially large Chinese arms agreements with Russia, possibly because the Chinese military is focused on absorbing and integrating previous arms purchases from Russia into its force structure.

Among the most significant arms transfer deals Russia made in 2006, was with Algeria. This package of agreements included the sale of 28 Su-30MKA fighter aircraft, 36 Mig-29SMT fighter aircraft, 16 Yak-130 advanced training aircraft; 8 battalions of S-300 PMU-2 SAM systems, a number of Pantsir-S1 (SA-22) air defense missile systems, and a number of T-90S Main Battle Tanks. The total cost of all of these weapons and associated equipment is estimated at \$7.5 billion. However, about \$4.7 billion of this total is being paid through forgiveness of Algerian debt to Russia, thus lowering the overall value of the sales package.

In 2006, Russia also made substantial new arms sales to Venezuela. Venezuela has major oil reserves. It, therefore, has the means to pay for advanced, and expensive, military equipment, making it a very attractive customer for Russia. During 2006 Russia reached a significant agreement with Venezuela for the sale of a package of military aircraft. Key elements of this agreement included the sale of 24 Su-30MK2V fighter aircraft for an amount in excess of \$1 billion, together with the purchase of a number of attack and transport helicopters, including Mi-17, Mi-26, and Mi-35 models, collectively costing in excess of \$700. Russia also sold Venezuela a substantial number of AK-103 assault rifles, and agreed to establish a factory in Venezuela for the production of both AK-103 assault rifles and the production of 7.62mm ammunition at a cost in excess of \$500 million. Venezuela's populist President, Hugo Chavez, has taken a hostile approach to relations with the United States in recent years. Thus his decision to seek advanced military equipment from Russia is a matter of U.S. concern. Chavez appears embarked on a effort to make Venezuela an important military force in Latin America. And since he has made clear that he plans to obtain additional advanced weapons systems from Russia, there is concern that such purchases could stimulate other states in the region to seek comparable weapons systems as a counterweight to Chavez's military buildup.³

China

In the 1980s the Iran-Iraq war provided the opportunity for China to become an important supplier of less expensive weapons to certain developing nations. During that conflict China demonstrated that it was willing to provide arms to both combatants in the war, in quantity and without conditions.

2. For detailed background see CRS Report RL30700, *China's Foreign Conventional Arms Acquisitions: Background and Analysis*, by Shirley Kan, Christopher Bolkcom, and Ronald O'Rourke; and CRS Report RL33153, *China Naval Modernization: Implications for U.S. Navy Capabilities — Background and Issues for Congress*, by Ronald O'Rourke. in the mid-1990s, Russia has sold major combat fighter aircraft, and main battle tanks to India, and has provided other major weapons systems though lease or licensed production. It continues to provide support services and items for these various weapons systems. In 2006, Russia largest arms agreement with India was for the sale of 3 Talwar-class frigates for an estimated \$1.3-1.6 billion.

3. For detailed background on Chavez's policy initiatives in Venezuela, and U.S. concerns see CRS Report RL32488, *Venezuela: Political Conditions and U.S. Policy*, by Mark P. Sullivan and Nelson Olhero.

From 2003-2006, the value of China's arms transfer agreements with developing nations averaged about \$1.3 billion annually, a figure skewed by a very large agreements total of \$2.6 billion in 2005. During the period of this report, the value of China's arms transfer agreements with developing nations peaked in 1999 at \$2.8 billion. China's sales figures that year, and in 2005, generally resulted from several smaller valued weapons deals in Asia, Africa, and the Near East, rather than one or two especially large agreements for major weapons systems. Similar arms deals with small scale purchasers in these regions are continuing. In 2006, China's arms transfer agreements total was \$800 million, a figure reflecting a variety of smaller sales to a range of established customers.

Few nations with significant financial resources have sought to purchase Chinese military equipment during the eight year period of this report, because most Chinese weapons for export are less advanced and sophisticated than weaponry available from Western suppliers or Russia. China, consequently, does not appear likely to be a major supplier of conventional weapons in the international arms market in the foreseeable future. Its most likely clients are states in Asia and Africa seeking quantities of small arms and light weapons, rather than major combat systems. At the same time, China has been an important source of missiles in the developing world arms market. China supplied Silkworm anti-ship missiles to Iran. Credible reports persist in various publications that China has sold surface-to-surface missiles to Pakistan, a long-standing and important client. Iran and North Korea have also reportedly received Chinese missile technology, which has increased their capabilities to threaten other countries in their respective neighborhoods. The continued reporting of such activities by credible sources raise important questions about China's stated commitment to the restrictions on missile transfers set out in the Missile Technology Control Regime (MTCR), including its pledge not to assist others in building missiles that could deliver nuclear weapons. Since China has some military products — particularly missiles — that some developing countries would like to acquire, it can present an obstacle to efforts to stem proliferation of advanced missile systems to some areas of the developing world where political and military tensions are significant, and where some nations are seeking to develop asymmetric military capabilities.⁴

China, among others, has been a key source of a variety of small arms and light weapons transferred to African states. Although the prospects for significant revenue earnings from these arms sales are limited, China views such sales as one means of enhancing its status as an international political power, and increasing its ability to obtain access to significant natural resources, especially oil. Controlling the sales of small arms and light weapons to regions of conflict, in particular to some African nations, has been a matter of concern to the United States. The United Nations also has undertaken an examination of this issue in an effort to achieve consensus on a path to address it.⁵

Major West European Suppliers

Beyond the United States and Russia, the four major West European arms suppliers France, the United Kingdom, Germany, and Italy are the nations that can supply a wide variety of more highly sophisticated weapons to would-be purchasers. They can serve as alternative sources of armaments that the United States chooses not to supply for policy reasons. The United Kingdom sold major combat fighter aircraft to Saudi Arabia in the mid-1980s, when the U.S. chose not to sell a comparable

4. For detailed background on the MTCR and proliferation control regimes and related policy issues see CRS Report RL31559, *Proliferation Control Regimes: Background and Status*, coordinated by Sharon Squassoni, and CRS Report RL31848, *Missile Technology Control Regime (MTCR) and International Code of Conduct Against Ballistic Missile Proliferation (ICOC): Background and Issues for Congress*, by Andrew Feickert.

5. For background on China's actions and motivations for increased activities in Africa see CRS Report RL33055, *China and Sub-Saharan Africa*, by Raymond W. Copson, Kerry Dumbaugh, and Michelle Lau. For background on U.S. policy concerns regarding small arms and light weapons transfers see CRS Report RS20958, *International Small Arms and Light Weapons Transfers: U.S. Policy*, by Richard F. Grimmett.

aircraft for policy reasons. These four NATO nations have been allies of the United States especially during the Cold War. Yet in the post-Cold War era, their national defense export policies have not been fully coordinated with the United States as likely would have been the case at the Cold War's height.

These European arms supplying states, particularly France, view arms sales foremost as a matter for national decision. France has also frequently used foreign military sales as an important means for underwriting development and procurement of weapons systems for its own military forces. So the potential exists for policy differences between the United States and major West European supplying states over conventional weapons transfers to specific countries. Such a conflict resulted from an effort led by France and Germany to lift the arms embargo on arms sales to China currently adhered to by members of the European Union. The United States viewed this as a misguided effort, and vigorously opposed it. The proposal to lift the embargo was ultimately not adopted, but it proved to be a source of significant tension between the U.S. and the European Union. Thus, arms sales activities of major European suppliers continue to be of interest to U.S. policy makers, given their capability to make sales of advanced military equipment to countries of concern to U.S. national security policy.⁶

The four major West European suppliers, France, the United Kingdom, Germany, and Italy, as a group, registered a decline in their collective share of all arms transfer agreements with developing nations between 2005 and 2006. This group's share fell from 34.4 percent in 2005 to 19.1 percent in 2006. The collective value of this group's arms transfer agreements with developing nations in 2006 was \$5.5 billion compared with a total of \$10.9 billion in 2005. Of these four nations, the United Kingdom was the leading supplier with \$3.1 billion in agreements in 2006, an increase from \$2.9 billion in agreements in 2005. A substantial portion of the United Kingdom's \$3.1 billion agreement total in 2006 was attributable to orders placed under the Al Yamamah military procurement arrangement with Saudi Arabia. Germany's \$1.8 billion in arms agreements in 2006 resulted from an agreement with Brazil for licensed production of a Type ILK 214 submarine and the upgrading of five existing Type 209 submarines, and from an Israeli order for two Type 800 Dolphin class submarines.

The four major West European suppliers collectively held a 19.1 percent share of all arms transfer agreements with developing nations during 2006. For four years after 1999, the major West European suppliers continued to lose their relative share of arms transfer agreements. In 2004 and 2005 this decline was dramatically halted, with the 2005 market share of arms agreements with developing nations 34.4 percent being the highest share the four major West European suppliers have held since 1999. During the 2003-2006 period, they collectively held 23 percent of all arms transfer agreements with developing nations \$24.2 billion. Individual suppliers within the major West European group have had notable years for arms agreements, especially France in 2000 and 2005 (\$2.6 billion and \$6.7 billion respectively). The United Kingdom also had large agreement years in 2004 (\$4.4 billion), in 2005 (\$2.9 billion), and \$3.1 billion in 2006. Germany concluded arms agreements totaling nearly \$2 billion in 1999, and \$1.8 billion in 2006. In the case of each of these three European nations, large agreement totals in one year have usually reflected the conclusion of very large arms contracts with one or more major purchasers in that particular year.

Major West European suppliers have had their competitive position in weapons exports strengthened over the years through strong government marketing support for their foreign arms sales. As they all

6. For detailed background see CRS Report RL32870, *European Union's Arms Embargo on China: Implications and Options for U.S. Policy*, by Kristin Archick, Richard F. Grimmett, and Shirley Kan. It should be noted that members of the European Union, and others, have agreed to a common effort to attempt some degree of control on the transfer of certain weapons systems, but the principal vehicle for this cooperation — the Wassenaar Arrangement — lacks a mechanism to enforce its rules. For detailed background see CRS Report RS20517, *Military Technology and Conventional Weapons Exports Controls: The Wassenaar Arrangement*, by Richard F. Grimmett.

can produce both advanced and basic air, ground, and naval weapons systems, the four major West European suppliers have competed successfully for arms sales contracts with developing nations against both the United States, which has tended to sell to several of the same clients, and with Russia, which has sold to nations not traditional customers of either the West Europeans or the United States. However, the demand for U.S. weapons in the global arms marketplace, from a large established client base, has created a more difficult environment for individual West European suppliers to secure large new contracts with developing nations on a sustained basis.

Continuing strong demand for U.S. defense equipment as well as concern for maintaining their market share of the arms trade has led European Union (E.U.) member states to adopt a new code of conduct for defense procurement practices. This code was agreed to on November 21, 2005 at the European Defense Agency's (EDA) steering board meeting. Currently voluntary, the E.U. hopes it will become mandatory, and through its mechanisms foster greater competition within the European defense equipment sector in the awarding of contracts for defense items. A larger hope is that by fostering greater intra-European cooperation and collaboration in defense contracting, and the resulting programs, that the defense industrial bases of individual E.U. states will be preserved, and the ability of European defense firms to compete for arms sales in the international arms marketplace will be substantially enhanced.

Some European arms suppliers have begun to phase out production of certain types of weapons systems. Such suppliers have increasingly engaged in joint production ventures with other key European weapons suppliers or even client countries in an effort to sustain major sectors of their individual defense industrial bases — even if a substantial portion of the weapons produced are for their own armed forces. The Eurofighter project is one example; the Eurocopter is another. Other European suppliers have also adopted the strategy of cooperating in defense production ventures with the United States such as the Joint Strike Fighter (JSF), rather than attempting to compete directly, thereby meeting their own requirements for advanced combat aircraft, while positioning themselves to share in profits resulting from future sales of this new fighter aircraft.⁷

Regional Arms Transfer Agreements

The markets for arms in regions of the developing world have traditionally been dominated by the Near East and by Asia. Nations in the Latin America and Africa regions, by contrast, have not been major purchasers of weapons, except on rare occasions. The regional arms agreement data tables in this report demonstrate this. United States policy makers have placed emphasis on helping to maintain stability throughout the regions of the developing world. Thus, the U.S. has made and supported arms sales and transfers it has believed would advance that goal, while discouraging significant sales by other suppliers to states and regions where military threats to nations in the area are minimal. Other arms suppliers do not necessarily share the U.S. perspective on what constitutes an appropriate arms sale. For in some instances the financial benefit of the sale to the supplier trumps other considerations. The regional and country specific arms transfer data in this report provide an indication of where various arms suppliers are focusing their attention, and who their principal clients are. By reviewing these data, policy makers can identify potential developments which may be of concern, and use this information to assist their review of options they may choose to consider given the circumstances. What follows below is a review of data on arms transfer agreement activities in the two regions that lead in arms acquisitions, the Near East and Asia. This is followed, in turn, by a review of data regarding the leading arms purchasers in the developing world.

7. For detailed background on issues relating to the Joint Strike Fighter program see CRS Report RL30563, *F-35 Joint Strike Fighter (JSF) Program: Background, Status, and Issues*, by Christopher Bolcom.

Near East⁸

The principal catalyst for new weapons procurements in the Near East region in the last decade was the Persian Gulf crisis of August 1990-February 1991. This crisis, culminating in a war to expel Iraq from Kuwait, created new demands by key purchasers such as Saudi Arabia, Kuwait, the United Arab Emirates, and other members of the Gulf Cooperation Council (GCC), for a variety of advanced weapons systems. Egypt and Israel continued their modernization and increased their weapons purchases from the U.S. The Gulf states' arms purchase demands were not only a response to Iraq's aggression against Kuwait, but a reflection of concerns regarding perceived threats from a potentially hostile Iran. Since the fall of Saddam Hussein, for many, the conventional ground threat from Iraq has diminished and the perceived threat from Iran has increased. This has led the GCC states to emphasize acquisition of air and naval defense capabilities over major ground combat systems.⁹

Most recently, the position of Saudi Arabia as principal arms purchaser in the Persian Gulf region has been re-established. In the period from 1999-2002, Saudi Arabia's total arms agreements were valued at \$4 billion (in current dollars), less than the levels of the U.A.E., Egypt and Israel. For the period from 2003-2006, Saudi Arabia's total arms agreements were \$12.4 billion (in current dollars), making it the leading Near East purchaser once again.

The Near East has generally been the largest arms market in the developing world. However, in 1999-2002, it accounted for 36.5 percent of the total value of all developing nations arms transfer agreements (\$29.7 billion in current dollars), ranking it second behind Asia which was first with 47.6 percent of these agreements. But, during 2003-2006, the Near East region accounted for 46.6 percent of all such agreements (\$46.7 billion in current dollars), again placing it first in arms agreements with the developing world. The Asia region ranked second in 2003-2006 with \$38.8 billion in agreements or 38.7 percent.

The United States dominated arms transfer agreements with the Near East during the 1999-2002 period with 68.4 percent of their total value (\$20.3 billion in current dollars). Russia was second during these years with 8.1 percent (\$2.4 billion in current dollars). Recently, from 2003-2006, the United States accounted for 48.9 percent of arms agreements with this region (\$22.8 billion in current dollars), while the United Kingdom accounted for 16.5 percent of the region's agreements (\$7.7 billion in current dollars). Russia accounted for 13.7 percent of the region's agreements in the most recent period (\$6.4 billion in current dollars).

Asia

Efforts in several developing nations in Asia have been focused on upgrading and modernizing defense forces, and this has led to new conventional weapons sales in that region. Since the mid-1990s, Russia has become the principal supplier of advanced conventional weaponry to China — selling fighters, submarines, destroyers, and missiles, while maintaining its position as principal arms supplier to India. Russian arms sales to these two countries have been primarily responsible for the increase in Asia's overall share of the arms market in the developing world. Russia has expanded its client base in Asia, receiving aircraft orders from Malaysia, Vietnam, and Indonesia. India has also expanded its weapons supplier base, purchasing the Phalcon early warning defense system aircraft in 2004 from Israel for \$1.1 billion, and numerous items from France in 2005, in particular 6 Scorpene

8. In this report the Near East region includes the following nations: Algeria, Bahrain, Egypt, Iran, Iraq, Israel, Jordan, Kuwait, Lebanon, Libya, Morocco, Oman, Qatar, Saudi Arabia, Syria, Tunisia, United Arab Emirates, and Yemen. The countries included in the other geographic regions are listed at the end of the report.

9. For detailed background see CRS Report RL31533, *The Persian Gulf States: Issues for U.S. Policy*, 2006, by Kenneth Katzman.

diesel attack submarines for \$3.5 billion. A multi-billion dollar sale in 2006 by the United States to Pakistan of new F-16 fighter aircraft, weapons, and aircraft upgrades, together with Sweden's sale to it of a SAAB-2000 based AWACS airborne radar system for over a billion dollars has placed Pakistan in the forefront of recent Asian buyers. The data on regional arms transfer agreements from 1999- 2006 continue to reflect that Near East and Asian nations are the primary sources of orders for conventional weaponry in the developing world.

Asia has traditionally been the second largest developing world arms market. In 2003-2006, Asia ranked second, accounting for 38.7 percent of the total value of all arms transfer agreements with developing nations (\$38.8 billion in current dollars). Yet in the earlier period, 1999-2002, the region ranked first, accounting for 47.6 percent of all such agreements (\$38.8 billion in current dollars).

In the earlier period (1999-2002), Russia ranked first in the value of arms transfer agreements with Asia with 45.4 percent (\$17.6 billion in current dollars). The United States ranked second with 24.4 percent (\$9.5 billion in current dollars). The major West European suppliers, as a group, made 12.6 percent of this region's agreements in 1999-2002. In the later period (2003-2006), Russia ranked first in Asian agreements with 37.1 percent (\$14.4 billion in current dollars), primarily due to major combat aircraft, and naval system sales to India and China. The United States ranked second with 18.6 percent (\$7.2 billion in current dollars). The major West European suppliers, as a group, made 19.3 percent of this region's agreements in 2003-2006.

Leading Developing Nations Arms Purchasers

India was the leading developing world arms purchaser from 1999-2006, making arms transfer agreements totaling \$22.4 billion during these years (in current dollars). In the 1999-2002 period, China ranked first in arms transfer agreements at \$11 billion (in current dollars). In 2003-2006 India ranked first in arms transfer agreements, with a large increase to \$14.9 billion from \$7.5 billion in the earlier 1999-2002 period (in current dollars). This increase reflects the continuation of a military modernization effort by India, underway since the 1990s, based primarily on major arms agreements with Russia. The total value of all arms transfer agreements with developing nations from 1999-2006 was \$188.9 billion in current dollars. Thus India alone accounted for 11.9 percent of all developing world arms transfer agreements during these eight years. In the most recent period, 2003-2006, India made \$14.9 billion in arms transfer agreements (in current dollars). This total constituted 14.4 percent of all arm transfer agreements with developing nations during these four years (\$100.3 billion in current dollars). China ranked second in arms transfer agreements during 2003-2006 with \$12.4 billion (in current dollars), or 12.4% of the value of all developing world arms transfer agreements.

During 1999-2002, the top ten recipients collectively accounted for 69.8 percent of all developing world arms transfer agreements. During 2003-2006, the top ten recipients collectively accounted for 64.4 percent of all such agreements. Arms transfer agreements with the top ten developing world recipients, as a group, totaled \$22.2 billion in 2006 or 77.1 percent of all arms transfer agreements with developing nations in that year. These percentages reflect the continued concentration of major arms purchases by developing nations among a few countries.

Pakistan ranked first among all developing world recipients in the value of arms transfer agreements in 2006, concluding \$5.1 billion in such agreements. India ranked second in agreements at \$3.5 billion. Saudi Arabia ranked third with \$3.2 billion in agreements. Four of the top ten recipients were in the Near East region; four were in the Asian region; two were in the Latin American region.¹⁰

10. For countries included in the Asia region and the Latin American region see the listings of nations by regions given at the end of this report.

Saudi Arabia was the leading recipient of arms deliveries among developing world recipients in 2006, receiving \$4.1 billion in such deliveries. China ranked second in arms deliveries in 2006 with \$2.9 billion. Israel ranked third with \$1.5 billion.

Arms deliveries to the top ten developing nation recipients, as a group, were valued at \$14.3 billion, or 71.9 percent of all arms deliveries to developing nations in 2006. Six of these top ten recipients were in Asia; three were in the Near East; one was in Latin America.

Weapons Types Recently Delivered to Near East Nations

Regional weapons delivery data reflect the diverse sources of supply and type of conventional weaponry actually transferred to developing nations. Even though the United States, Russia, and the four major West European suppliers dominate in the delivery of the fourteen classes of weapons examined. It is also evident that the other European suppliers and some non-European suppliers, including China, are capable of being leading suppliers of selected types of conventional armaments to developing nations.

Weapons deliveries to the Near East, historically the largest purchasing region in the developing world, reflect the quantities and types delivered by both major and lesser suppliers. The following is an illustrative summary of weapons deliveries to this region for the period **2003-2006**.

United States
<ul style="list-style-type: none">• 349 tanks and self-propelled guns• 715 APCs and armored cars• 2 major surface combatants• 5 minor surface combatants• 71 supersonic combat aircraft• 66 helicopters• 465 surface-to-air missiles• 87 anti-ship missiles
Russia
<ul style="list-style-type: none">• 120 APCs and armored cars• 20 supersonic combat aircraft• 30 helicopters• 1,240 surface-to-air missiles
China
<ul style="list-style-type: none">• 20 artillery pieces• 50 anti-ship missiles
Major West European Suppliers
<ul style="list-style-type: none">• 120 tanks and self-propelled guns• 60 APCs and armored cars• 4 major surface combatants• 46 minor surface combatants• 10 guided missile boats• 30 supersonic combat aircraft• 20 helicopters• 40 anti-ship missiles

All Other European Suppliers.

- 300 tanks and self-propelled guns
- 1,250 APCs and armored cars
- 20 minor surface combatants
- 2 guided missile boats
- 10 supersonic combat aircraft
- 10 helicopters
- 320 surface-to-air missiles
- 10 anti-ship missiles

All Other Suppliers

- 640 APCs and armored cars
- 98 minor surface combatants
- 30 helicopters
- 40 surface-to-surface missiles
- 10 anti-ship missiles

Large numbers of major combat systems were delivered to the Near East region from 2003-2006, specifically, tanks and self-propelled guns, armored vehicles, major and minor surface combatants, supersonic combat aircraft, helicopters, air defense and anti-ship missiles. The United States and Russia made deliveries of supersonic combat aircraft to the region. The United States, China, and the European suppliers delivered many anti-ship missiles. The United States, Russia, and European suppliers in general were principal suppliers of tanks and self-propelled guns, APCs and armored cars, surface-to-air missiles, as well as helicopters. Three of these weapons categories — supersonic combat aircraft, helicopters, and tanks and self-propelled guns — are especially costly and are a large portion of the dollar values of arms deliveries by the United States, Russia, and European suppliers to the Near East region during the 2003-2006 period.

The cost of naval combatants is also generally high, and the suppliers of such systems during this period had their delivery value totals notably increased due to these transfers. Some of the less expensive weapons systems delivered to the Near East are, nonetheless, deadly and can create important security threats within the region. In particular, from 2003-2006, the United States delivered 87 anti-ship missiles to the Near East region, China delivered 50, and the four major West European suppliers delivered 40. The United States delivered two major surface combatants and five minor surface combatants to the Near East, while the major West European suppliers collectively delivered four major surface combatants, 46 minor surface combatants and 10 guided missile boats. The non-major West European suppliers collectively delivered 10 anti-ship missiles. Other non-European suppliers collectively delivered 640 APCs and armored cars, 98 minor surface combatants, as well as 40 surface-to-surface missiles, a weapons category not delivered by any of the other major weapons suppliers during this period to any region.

United States Commercial Arms Exports

United States *commercially licensed arms deliveries* data are not included in this report. The United States is the only major arms supplier that has two distinct systems for the export of weapons: the government-to-government Foreign Military Sales (FMS) system, and the licensed commercial export system. It should be noted that data maintained on U.S. *commercial* sales agreements and deliveries are incomplete, and are not collected or revised on an on-going basis, making them significantly less precise than those for the U.S. FMS program — which accounts for the overwhelming portion of

U.S. conventional arms transfer agreements and deliveries involving weapons systems. There are no official compilations of *commercial agreement* data comparable to that for the FMS program maintained on an annual basis. Once an exporter receives from the State Department a *commercial license authorization* to sell — valid for four years — there is no current requirement that the exporter provide to the State Department, on a systematic and on-going basis, comprehensive details regarding any *sales contract* that results from the license authorization, including if any such contract is reduced in scope or cancelled. Nor is the exporter required to report that no contract with the prospective buyer resulted.

Annual *commercially licensed arms deliveries* data are obtained from shipper's export documents and completed licenses from ports of exit by the U.S. Customs and Border Protection Agency which are then provided to the U.S. Census Bureau. The Census Bureau takes these arms export data, and, following a minimal review of them, submits them to the Directorate of Defense Trade Controls in the Political-Military Bureau (PM/DDTC) of the State Department, which makes the final compilation of such data — details of which are not publicly available. Once compiled by the Directorate of Defense Trade Controls at the State Department, these *commercially licensed arms deliveries* data are not revised. By contrast, the U.S. Foreign Military Sales (FMS) program data, for *both* agreements and deliveries, maintained by the Defense Department, are systematically collected, reviewed for accuracy on an on-going basis, and are revised from year-to-year as needed to reflect any changes or to correct any errors in the information. This report includes all FMS deliveries data. By excluding U.S. commercial licensed arms deliveries data, the U.S. arms *delivery* totals will be understated.

Some have suggested that a systematic data collection and reporting system for commercial licensed exports, comparable to the one which exists now in the Department of Defense, should be established by the Department of State. Having current and comprehensive agreement and delivery data on commercially licensed exports would provide a more complete picture of the U.S. arms export trade, in this view, and thus facilitate Congressional oversight of this sector of U.S. exports.